# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

In Re: Application of: Date: July 21, 2008

5 Allen Berger, Jr.

Serial No. **10/822,079** Art Unit: **3634** 

Filed: April 12, 2004 Examiner: Blair M. Johnson

For: "GARAGE DOOR REINFORCEMENT SYSTEM"

Attorney Docket No. 240061.4

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#### TWICE AMENDED BRIEF FOR APPELLANT

Board of Patent Appeals and Interferences
U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

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#### Honorable Board Members:

This is an appeal for the Office Action finally rejecting claims 1 through 4 on September 25, 2007. The claims on appeal are included in the Appendix. A notice of appeal and extension of time fee were filed on March 25, 2008.

#### I. REAL PARTY IN INTEREST.

The original applicant and inventor, Allen Berger, Jr., controls, along with other family members, DAB Door Company, Inc., which is the real party in interest by virtue of an assignment recorded in reel 015909, frame 0585.

#### II. RELATED APPEALS AND INTERFERENCES.

There are no other related appeals or interferences.

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#### III. STATUS OF CLAIMS.

The following pending claims (1 through 4) subject of this appeal were included in the amendment filed on March 19, 2007 and all claims stand rejected:

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1. (Rejected). In a reinforced garage door in which said garage door has a plurality of panels, having a horizontal width and a vertical height, which panels are monolithic for the entire length of the panels, with adjacent panels above such panels having reversely folded edge portions with complementing joints along the top edge and the bottom edge, such panels

having open end members, space vertically and interiorly of the door, and means for securement at the extreme lateral edges to a track for raising and lowering the door, the improvement comprising a plurality of longitudinal unitary reinforcement members insertable horizontally and interiorly of the complementing joints top and bottom longitudinal reversely folded edge portions of the panel from one end thereof to the other uninterrupted and having conforming longitudinal portions for said complementing joints and coming in abutting longitudinal contact with the latter.

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2. (Rejected). The reinforced garage door set forth in claim 1 wherein said reinforcement is formed with first, second, third, fourth and fifth folded longitudinal walls, said first and second walls being parallel and spaced apart by said third wall to which the former are perpendicularly mounted, and said fourth and fifth walls being inwardly folded from said first and second walls and said fourth and fifth walls kept next to each other in the same plane, said fourth and fifth wall conforming to the contour of said complementing joints.

- 3. (Rejected). The reinforced garage door set forth in claim 2 wherein said complementing joints are of the tongue and groove type and said conforming longitudinal portions are also of the tongue and groove type.
- 4. (Rejected). The reinforced garage door set forth in claim 2 wherein said complementing joints are of the shiplap type and said conforming longitudinal portions are also of the shiplap type.

#### IV. STATUS OF AMENDMENTS.

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The Examiner entered the amendment filed on March 19, 2007, mentioned above. The claims read as included in the appendix. A request for reconsideration and amendment after final rejection was filed on May 2, 2008, along with a declaration from Applicant. The Examiner has acted on the request and entered the amendment of claim 1 for the deletion of the words "open reinforcing members" which can be optionally used without affecting the subject matter claimed herein. See Advisory Action dated May 14, 2008. These are conventional reinforcement members that the present invention attempts to eliminate altogether or reduce the number used substantially to achieve a predetermined protection.

#### V. SUMMARY OF THE CLAIMED SUBJECT MATTER.

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The present invention relates to a novel garage door reinforcement system. In May, 2000, Applicant received U.S. patent No. 6,062,293 for a garage door reinforcement device. Applicant has been in the garage door business for many years. Facing the problem of providing sufficiently reinforced garage doors to meet the local authorities' wind tests, Applicant and others in the industry have designed many devices that meet this need while typically augmenting the cost of materials, transportation, maintenance and installation, as well as the weight of the door assembly. See Leist reference, col. 1 verifying some of the problems faced by manufacturers in the industry. With more weight, the need to upgrade the motor's capacity to move the door is guite apparent. Merely making the door panels thicker will increase the cost of the door assembly. Applicant's invention resides in the novel approach to solve this problem by selectively reinforcing the most vulnerable portions of the door assembly, namely, the joint folds, with reinforcement members as claimed in independent Jepson-type claim 1. This is accomplished by using a plurality of longitudinal unitary reinforcement members labeled as reinforced runners 50 and 60 and best illustrated in figure 4 of the present application. Runners 50 and 60 include longitudinal portions forming ends 24 and 26 that conform to complementing joints and come in abutting longitudinal

contact with them. See specifications page 5, line 6, lines 12-16. Runner 50 includes longitudinal curved portions 57 and 57' that conform to longitudinal tongue 32. See specifications page 6, lines 21-22.

The unexpected results obtained by conforming these longitudinal portions of Applicant's previously used unitary reinforcement members have been documented with Applicant's declaration. This change in his manufacturing practices has contributed to the commercial success experienced with his new doors. Applicant's doors now pass the same wind tests using less conventional outside reinforcement members, using less steel.

#### VI. GROUNDS FOR REJECTION TO BE REVIEWED ON APPEAL

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Claims 1 through 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The amendment of May 2, 2008, after final rejection obviates this objection and it was entered through the Examiner's Advisory Action dated May 14, 2008. The open reinforcing members are conventional, optionally used and quite different from the unitary reinforcement member.

Claims 1 through 4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Leist el al. (U.S. patent No. 5,555,923).

Claims 1 through 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berger, Jr. (U.S. patent No. 6,062,293).

#### VII. ARGUMENTS.

References relied by the Examiner:

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<u>Patentee</u>	Patent No.	<b>Publication Date</b>
Leist et al.	5,555,923	September 17, 1996
Berger, Jr.	6,062,293	May 16, 2000

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Claims 1 through 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With the proposed amendment, this objection is overcome. There is no confusion between the conventional outer reinforcement members and the unitary reinforcement members that are interiorly mounted and conforming to the joints.

Claims 1 through 4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Leist et al. (U.S. patent No. 5,555,923). Applicant respectfully disagrees. Basically, there are several hurdles for the application of Section 102 based on the Leist patent.

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1. A non-unitary telescopically arrangement and interrupted bars 32 that fail to provide the structural integrity that is required to pass the pertinent high wind tests. Not having a continuous unitary reinforcement member compromises the rigidity of the garage door.

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2. The location of the reinforcement in Leist is outside the folded ends of the panels, which are the most vulnerable portions of the doors. Members 32 in Leist are placed a considerable distance away from these articulation folds referred to as male and female joint members 66 and 68 in Leist's patent. Leist's Col. 6, lines 4- 6. See also Leist's figure 4. So, even if the discrete "telescopic" reinforcement pieces disclosed are to be interpreted as equivalent to the unitary reinforcement member, their location makes them ineffective to protect the joint members 66 and 68.

3. Lastly, the conforming characteristics to the folded articulations is not even suggested by Leist. The Examiner equates the conforming of the shape of the joints to Applicant's conforming of the reinforcing members to the shape of the joints. See p. 2, last paragraph, of final Office action. There is no attempt to discuss the vulnerability that joint members 66 and 68 present. Leist was not even concerned about this problem. The present invention selectively strengthens the joints by conforming the reinforcing members to the longitudinal shape of the folds or joints. This feature is just not present in Leist.

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- Claims 1 through 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berger, Jr. (U.S. patent No. 6,062,293). Berger's patent, on the other hand, includes a unitary reinforcement piece in the folded area. Berger's patent does not disclose conforming longitudinal portions of the reinforcement piece. But it was precisely this finding of conforming the reinforcement member to the interior of the articulations or joints that is responsible for the unexpected results obtained. Claim 1 includes the following language:
  - ... a plurality of longitudinal unitary reinforcement members insertable horizontally and <u>interiorly</u> of the complementing joints...

... and having <u>conforming</u> longitudinal portions...

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It is the unexpected result experienced by conforming the reinforcement members that permits the Applicant to manufacture his reinforced garage doors with a minimum of weight and cost. In the roll forming industry, the sheets of metal have a uniform pre-selected gauge. So, it would not be possible to form portions of the folds with thicker material while the rest of the panel is made with the thinner material. The effect of the conforming longitudinal portions of the reinforcement members that come in abutting longitudinal contact with the joints is equivalent to using thicker (stronger) material in selective places (i.e. the vulnerable joints). This feature has not been taught or suggested in the cited references, taken singly or in combination. Not even the Applicant suspected that this change in the configuration and cooperation of his reinforcement member would have such an effect. It would be reasonable to expect the Applicant herein to have incorporated this change, had it been known at the time of the invention, since there has been a substantial economic reward for implementing it. It was not until after hundreds of doors were manufactured that the inventor came across his invention. There was no reason for the inventor herein to have looked at Leist's disclosure to modify Applicant's original design disclosed in Berger's patent. In

fact, Leist would have required the Applicant to move the reinforcement members away from the joints, something that will prevent it from working.

Applicant is not unmindful of the KSR admonition against a rigid application of the TSM (teaching, suggestion motivation) test. *KSR v. Teleflex*, 127 S. Ct. 1727, 1740, 167 L. Ed.2d 705, 82 U.S. P.Q.2d, 1385 (2007).

Nonetheless, the test is not inconsistent with the Graham analysis. *Id* at 1731. And that the test can be used to provide helpful insights on the issue of obviousness. *Id*. See also, *Takeda Chemical Indus. v. Alphapfarm Pty., Ltd.*, slip op., 492 F.3d 1350, 2007 W 1839698 (Fed. Cir. 2007). Thus, the TSM test can be a good starting point to identify "a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does" in an obvious determination. *KSR* at 1731, *Takeda* at 1356-1357.

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Berger's patent teaches the use of unitary reinforcement members that Leist fails to disclose. In fact, Leist teaches away from using a unitary member and opts for subpanel channels to improve its transportation logistics. Leist, Col. 1, lines 29-42. Leist needs to connect his connecting bars 32 to each other by providing a reduced portion 38 and an enlarged portion 40. Leist, Col. 5, lines 23-45. It can be

<sup>&</sup>lt;sup>1</sup> Panels 12a, 12b, 12c and 12d, each, are composed of subpanels 14a, 14b, 14c and 14d. Col. 4, lines 30-32.

seen in Leist's figure 4 that connecting bar 32 is placed away from the articulating joint (fold), let alone conform to the joint. In the present invention the reinforcement member conforms to the shape of the joints providing additional effective reinforcement.

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In Takeda, the patentee had included fifty four compounds in the parent application (subsequently patent '200) yet the applicant had not particularly identified the species for the advantages later sought in the continuation patent. See Takeda at 1357. Yet, the appellant in that case was unable to make its *prima* facie showing of obviousness. Similarly, for this mechanical invention, the inventor disclosed a unitary interiorly disposed reinforcement member that extends the entire length of the garage door assembly in his patent (the Berger patent). Conceivably, his Berger patent claim may be considered a genus for the claims in the present case that did not identify the particular feature that resulted when the reinforcement, inside the joint, was made to actually conform to its shape. It was upon subsequent experimentation with the reinforcement member that the inventor herein came across this solution to the industry wide quest to make doors with the least amount of material and yet withstand wind forces. The conforming feature of the reinforcement members effectively and selectively provides the strength solution found by the inventor after his obtaining his patent. There was no reason

to compel the inventor, or anyone else, at the time of the invention consider conforming the shape of the reinforcement to the articulated joints of the panels. Leist was concerned about making the door assembly more portable to alleviate transportation problems and Berger was concerned with introducing a unitary reinforcement piece that could be interiorly placed. It was not until the Applicant conformed the shape of its reinforcement member to those of the joints that the unexpected results were obtained, namely, passing the wind tests with less outer reinforcement members ( that are aesthetically unattractive).

There is no showing of "adequate support in the prior art" for the change in the structure. *In re Grabiak*, 769 F.2d 729, 731-32 (Fed. Cir. 1985).

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#### VIII. CLAIMS APPENDIX

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- In a reinforced garage door in which said garage door has a plurality 1. of panels, having a horizontal width and a vertical height, which panels are monolithic for the entire length of the panels, with adjacent panels above such panels having reversely folded edge portions with complementing joints along the top edge and the bottom edge, such panels having open end members, space vertically and interiorly of the door, and means for securement at the extreme lateral edges to a track for raising and lowering the door, the improvement comprising a plurality of longitudinal unitary reinforcement members insertable horizontally and interiorly of the complementing joints top and bottom longitudinal reversely folded edge portions of the panel from one end thereof to the other uninterrupted and having conforming longitudinal portions for said complementing joints and coming in abutting longitudinal contact with the latter.
- 2. The reinforced garage door set forth in claim 1 wherein said reinforcement is formed with first, second, third, fourth and fifth folded longitudinal walls, said first and second walls being parallel and spaced apart by said third wall to which the former are perpendicularly mounted,

and said fourth and fifth walls being inwardly folded from said first and second walls and said fourth and fifth walls kept next to each other in the same plane, said fourth and fifth wall conforming to the contour of said complementing joints.

- 3. The reinforced garage door set forth in claim 2 wherein said complementing joints are of the tongue and groove type and said conforming longitudinal portions are also of the tongue and groove type.
- 4. The reinforced garage door set forth in claim 2 wherein said complementing joints are of the shiplap type and said conforming longitudinal portions are also of the shiplap type.

# IX. EVIDENCE APPENDIX.

Applicant filed his declaration documenting the unexpected results and commercial success brought about by the claimed invention. See attached.

# X. RELATED PROCEEDINGS APPENDIX

There are no related proceedings.

### XI. CONCLUSION.

When this invention and the application's claims are fully analyzed and interpreted as explained above, it will be apparent that there is a good and clear difference between this invention and the cited prior art. When all factors are taken into consideration and given their due weight, it is believed that the Board of Appeals will be able to reverse the Examiner and such is now requested.

10	Respectfully submitted,	
10	SANCHELIMA & ASSOCIATES, P.A. Attorneys for Applicant	
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### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re: Application of:

Date: March 13, 2008

Allen Berger, Jr.

Serial No. 10/822,079

Art Unit: 3634

5 Filed: April 12, 2004

Examiner: Blair M. Johnson

Attorney Docket No. 240061,4

Title: GARAGE DOORS REINFORCEMENT SYSTEM

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## DECLARATION OF ALLEN BERGER, JR.

The undersigned declares that:

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- 1. I am the inventor in this application and U.S. patent No. 6,062,293 entitled GARAGE DOOR REINFORCEMENT AND METHOD.
- 2. I have been in the garage door business since 1976. Our garage door company sells over 10,000 garage doors per year.
  - 3. We have experienced a marked competitive advantage ever since we introduced the reinforcement claimed in my above-referenced patent. Other competitors have shown interest in our patented product and intended to buy our company.
  - 4. Since I invented the improved reinforcement, subject of the present application claims, I have been able to pass the high wind tests using less

open reinforcement trusses (inside the garage reinforcements). We have gone from three trusses to one truss and we obtain the same results.

- 5. Going from three trusses to one has reduced substantially the overall reinforcement costs of our doors and still pass the high wind tests.
- 6. Prior to my present invention I did not know, nor did I suspect, that bringing the internal unitary reinforcement in direct contact wit the interior surface of the joints was going perform this well and save us these substantial costs. The conforming longitudinal portions have been directly responsible for our commercial success.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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Inventor

Allen Berger, Jr.

Date:

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# Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)
10/822,079	BERGER, ALLEN
Examiner	Art Unit
Blair M. Johnson	3634

The MAILING DATE of this communication appears on the cover sheet with the correspondence address
THE REPLY FILED <u>02 May 2008</u> FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.
1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:
a) The period for reply expiresmonths from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).
Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  NOTICE OF APPEAL
2. The Notice of Appeal was filed on A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of
filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).  AMENDMENTS
The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because  (a) They raise new issues that would require further consideration and/or search (see NOTE below);  (b) They raise the issue of new matter (see NOTE below);
(c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.  NOTE: (See 37 CFR 1.116 and 41.33(a)).
4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. Applicant's reply has overcome the following rejection(s): 112 rejection.
6. Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: Claim(s) objected to:
Claim(s) rejected: <u>1-4</u> . Claim(s) withdrawn from consideration:  AFFIDAVIT OR OTHER EVIDENCE
8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.  REQUEST FOR RECONSIDERATION/OTHER
11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  Regarding the "continuous" reinforcement member, Berger, at least, provides this feature. The reinforcement members of Leist, or of Berger in view of Leist, are within the folded ends of the panels, as recited. Likewise, they are conforming, as recited.
12. Note the attached Information <i>Disclosure Statement</i> (s). (PTO/SB/08) Paper No(s)
13. Other:
/Blair M. Johnson/
Primary Examiner, Art Unit 3634